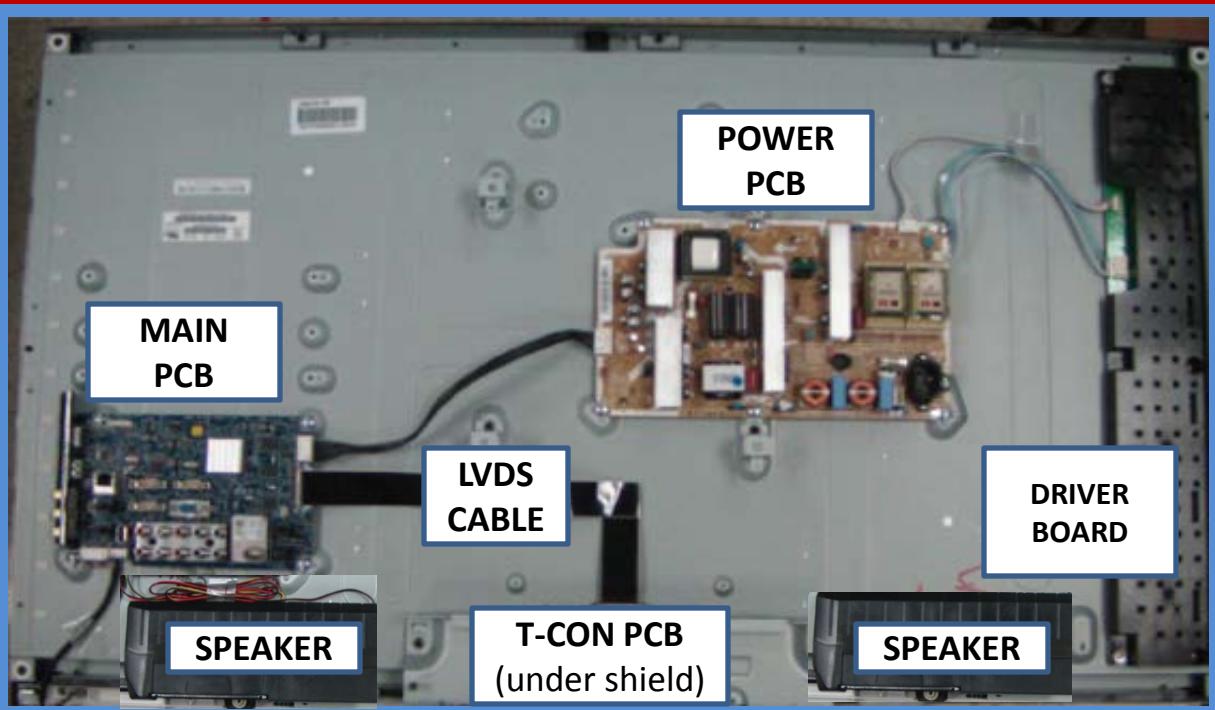


SERVICE BULLETINS**2010 LCD Option Byte Table****Verify All Parts Numbers Are Current**

HELP: 1-888-751-4086; 1-866-8940637 (FE)

GSPN

<http://gspn3.samsungcsportal.com>

PLUS ONE

<http://my.plus1solutions.net/clientPortals/samsung>

HOT TIPS

Power On Problems: (see page 2)

Video Problems: (see pages 3,4)

TIP: After replacing Main/Panel
picture is upside down.

Fix: Test Mode/Mirror Option/Toggle

FIRMWARE

10/18/2010

Firmware for SX1 & X4 Model

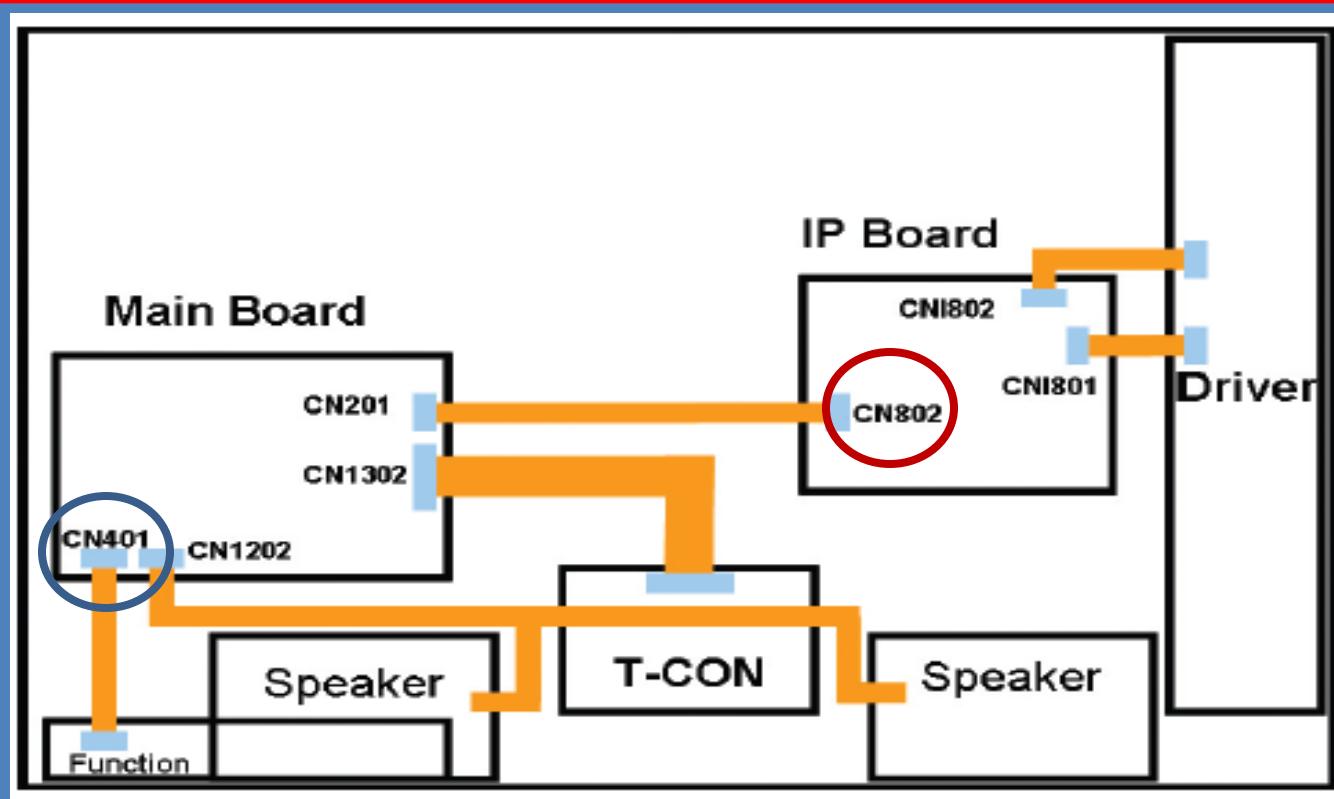
- Version : 1016.3 (SX1), 2006.0 (X4)
- Folder Name: T-TDT5AUSC / T-MSX5AUSC

Description

This firmware will prevent below problems

- . Distorted picture on 70 Hz, 75 Hz
- . Distorted picture on DTV PIP with 1080i mode

Version	Parts No	Short Description
ALL	BN44-00343B	Power PCB Function & IR PCB
ALL	BN96-13022C	
ALL	BN94-02617U	Main PCB
ALL	BN07-00814A	Panel
ALL	BN81-04161A	T-CON PCB
ALL		Stand Guide Neck
ALL		Rear Cover
ALL	BN96-12787A	Front Cover
ALL	BN96-12760D	Stand Guide
ALL	BN96-12801A	Stand Base
ALL	BN40-00163A	Tuner
ALL	BN96-12837C	Speaker
ALL	BN96-13171X	LVDS Cable
ALL	3903-000467	Power Cord
ALL	BN59-00996A	Remote
ALL	BN63-01798B	Cleaning Cloth



CN201

CN201(to Power board)

1	B12V_PW	10	GND
2	A5V_PW	11	GND
3	B12V_PW	12	H_OUT
4	A5V_PW	13	B13V_PW
5	B5V_PW	14	PWM_DIMMING_OUT
6	B5V_PW	15	B13V_PW
7	B5V_PW	16	B5V_PW
8	GND	17	B13V_PW
9	GND	18	IP_DET

Power On Sequence (approximate Voltages)

1. **Standby Voltages:** CN201-4 (5V)
2. **Power On CN201-2 (0 – 3V)**
3. **Low Voltage Supplies On CN201-1,3,5,7,13,15,17 (Volts Listed on CN802)**
4. **Back Light On CN201-16 (0-3V, delayed)**
5. **Back Light Confirm CNI802- (FB1 & FB2)**
6. **Dimming Signal CN201-14 (1V–4V approx)**

To Force Backlight On without Main Board :

1. Remove Power Cord
2. Remove CN802
3. Plug Power Cord In.
4. Backlight should be on immediately.

CN401(to Function/IR)

1	IR	6	KEY_INPUT1
2	GND	7	KEY_INPUT2
3	A3.3V_PW	8	LED_STB
4	MSCL_A5V	9	LED_CNTR
5	MSDA_A5V	10	A3.3V_PW

TROUBLESHOOTING VIDEO PROBLEMS

1. Verify Video Operation

- a. Customer Picture Test (models available)
- b. "Display" (If display is OK source is suspected)
- C. Substitute with known good Source
(external DVD or Signal Generator)

2. Using Test Patterns in Service Mode

- ENTER SERVICE MODE –

1. Select an active source signal. (HDMI preferred)
Test Pattern may rely on signal source to appear.

Customer Remote

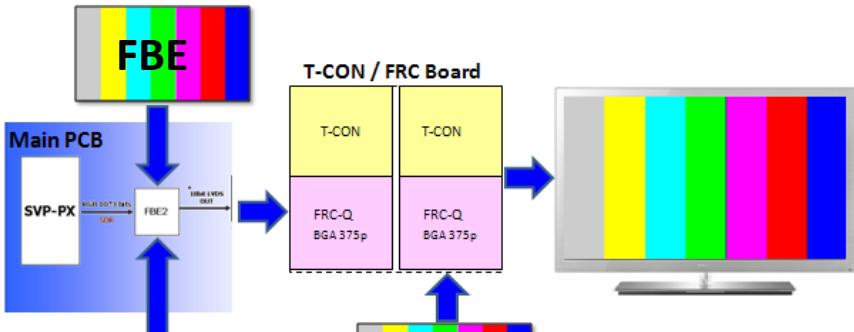
2. Power off
3. Mute, 182, Power

Service Remote

2. Power On
3. Info, Factory

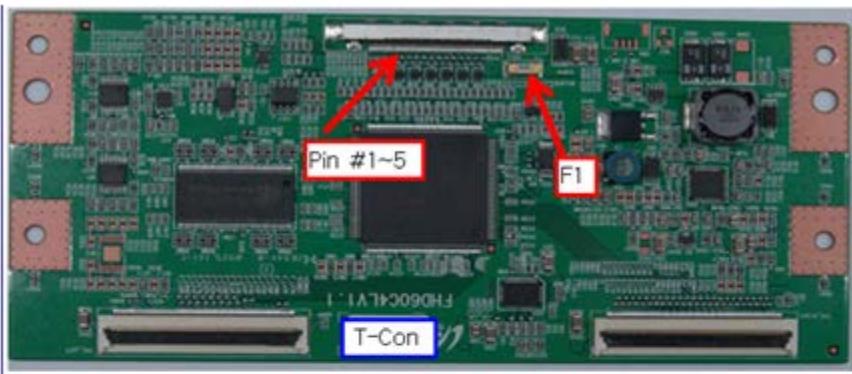
2010 Models with FRC 120Hz/240Hz

LCD Signal Path for Troubleshooting



1. Check OSD & Customer Picture Test.
2. Access SVC Mode (with source signal)
3. Activate **FBE** Test Patterns & Verify.
4. Activate **FRC** Test Patterns & Verify.

T-Con Troubleshooting



Check for 13V supply to Pins 1-5 and LVDS Side of F1 Fuse, if 13V is **NOT** present....

NO

Check for defective LVDS Cable or 13V feed error.

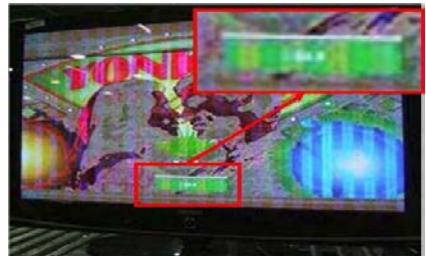
if 13V IS present but NOT on both sides of F1 fuse (Open Fuse)....

NO

Change T-Con Board



ON SCREEN FAILURE EXAMPLES:



If Picture & Display errors
Defective Main Board, LVDS,
or T-CON



Green lines or a green screen
defective main board , LVDS , or
T-CON.

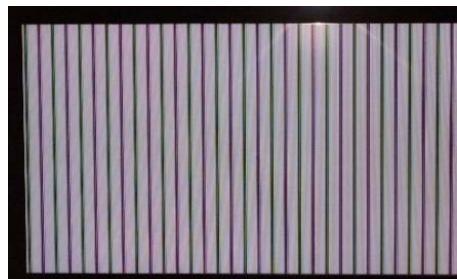


Original Image



Image on Screen

Pixelization can be caused by the main board
but is more commonly a source error



Vertical or Horizontal Lines :Defective
Panel likely but also T-CON, LVDS, or Main
Board. Use Test Patterns in Factory Service
Mode to determine error)

ALIGNMENTS:

1. Check/Set Option Bytes:

Using the Customer Remote

1. Turn the power off and set to stand-by mode
2. Press the remote button in this order: POWER-OFF-MUTE-1-8-2-POWER ON to turn the set on.
3. The TV enters service mode and enters service menu. This may take approximately 20 seconds.
4. Press the Power button twice and store data in memory.
 - If you fail to enter service mode, repeat steps 1 and 2 above.
5. Initial SERVICE MODE DISPLAY State

Project	PB5G	PB5G	PB5G
Model	B550	B550	B550
Model Code	PN50B550T2FXZA	PN50B550T2FXZA	PM63B550T2FXZA
No	ITEMS		
1	Factory Reset		
2	Type	50FSpl4	50FNK1
3	Model	PB550	PB550
4	TUNER	ALPS	ALPS
5	Region	US	US
6	DDR	SAMSUNG	SAMSUNG
7	Light Effect	Off	Off
8	Inch	50"	50"
9	Exhibition Mode	Off	Off

Option Bytes

Factory Reset		50HSnB4	
Type	50HSnB4	Model	PB550
TUNER	ALPS	Region	US
Region	SAMSUNG	DDR	SAMSUNG
Light Effect	Off	Inch	50"
Exhibition Mode	Off	Exhibition Mode	Off

Model Code	Front Color	Type	Model	Tuner	Region	Side Label
LN52C530F1FXZA	S-R-Black	52A6AF0C	LC530	Semco	US	SQ01

2. Check/Perform Firmware Upgrade for all repairs.

3. Perform reset in Service Mode & Plug and Play if Main board is replaced.

SPECIAL NOTES:

Inform customer of reset of all
Settings if Main Board or Panel is replaced.